

REMARKS

Claims 1-13 are pending in the application. Claims 2 has been canceled, claim 1 has been amended to include the limitation of claim 2, and claims 10-12 have been rewritten in independent form, leaving claims 1 and 3-13 for consideration upon entry of the amendment. Applicants respectfully request reconsideration in view of the amendment and remarks submitted herewith.

Claims 1-11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Dawson et al. (US 6,229,506) ("Dawson"). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the * * * claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claims 1-9 include the following limitation: "wherein a gate and either a source or a drain of said compensation thin film transistor are connected, and said compensation thin film transistor is connected between said driving power supply and said element driving thin film transistor." Dawson does not disclose that limitation.

The Examiner asserts that Dawson discloses a gate (G, 270, Fig. 2) and a source (S, 270) of the compensation thin film transistor (270) are connected because the gate G is connected to S through the transistors P1 and P4, and capacitor Cs. However, in Dawson, the N-type TFT 270 is of a conduction type opposite from both TFT 250 and TFT 240, which are P-type. Because all of these TFTs 270, 250, and 240 are connected to the same selection line 210, there exist no instances where TFT 270 is turned on simultaneously with TFTs 250, 240 to conduct electricity. See column 3, lines 11-64.

More specifically, in Dawson, when the select line 210 is set to High, TFT 270 is turned on and the source S of TFT 270 and the power line 295 are connected via the channel. At this point, the P-type TFTs 250, 240 are turned off. The source S of TFT 270 is therefore electrically isolated from the gates of TFTs 250, 240. In addition, when the select line 210 is set to Low, TFTs 250, 240 are turned on and TFT 270 is turned off. At this point, the gate and the source of TFT 270 are electrically isolated from one another.

Thus, Dawson nowhere describes or suggests a gate and either a source or a drain of said compensation thin film transistor are connected, and that the compensation thin film transistor is connected between said driving power supply and said element driving thin film transistor. Accordingly, Applicants respectfully request that the rejection regarding claims 1-

9 be withdrawn.

Claim 10 includes the following limitation: "wherein said element driving thin film transistor and said compensation thin film transistor are placed so that the channel length direction of said thin film transistors is along the extension direction of the data line for supplying said data signal to said switching thin film transistor." Claim 11 includes the following limitation: "wherein the channel length direction of said element driving thin film transistor does not coincide with the channel length direction of said switching thin film transistor." Dawson does not disclose those limitations.

The Examiner refers to a circuit diagram of Dawson to maintain that the element driving TFT and compensation TFT are placed such that the channel length direction of the TFTs is along the extension direction of the data line. However, a circuit diagram only represents electrical connection relationships, and very often does not match with the actual structural layout. The fact that directions indicated in a circuit diagram do not determine the actual structural layout is common knowledge in both the semiconductor device field and the field of displays.

Thus, Dawson does not disclose or teach anything regarding a channel length direction. Accordingly, Applicants respectfully request that the rejection regarding claims 10 and 11 be withdrawn.

Claims 12 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dawson in view of Higashi (U.S. 6,136,632). For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Claims 12-13 include the following limitation: "said element driving thin film transistor is formed so that its channel length direction is along the scan direction of a line pulse laser for annealing the channel region of the transistor." The Examiner states that Dawson does not teach or suggest that limitations and asserts that Higashi does teach that limitations.

However, Higashi does not teach or suggest that the element driving TFT is formed such that its channel length direction is along the "scan direction" of a line laser. Instead, Higashi explains that the channel length direction of TFT 10 matches the direction of the

"longer length" of a line-shaped laser beam. The longer length direction of a line-shaped laser beam is entirely different from the line laser "scan direction" referred to in the present application. A scan direction is the direction in which a laser beam advances, and is a concept completely different from the length (longitudinal) direction of a laser. Scan and length directions therefore do not necessarily match. Particularly in Higashi, the laser scan direction is the Y direction, not the longer length direction (X) of the laser. In other words, the laser scan direction as defined in the present application corresponds to the Y direction of Higashi. Higashi clearly recites that the channel length direction is preferably arranged along the X direction. This is almost equivalent to stating that it is undesirable to arrange the channel length direction along the Y direction.

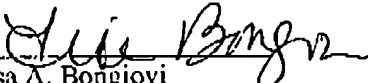
Thus, neither Dawson nor Higashi teach or suggest all of the limitations of claims 12 and 13. Accordingly, Applicants respectfully request that the rejection regarding claims 12 and 13 be withdrawn.

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By: 
Lisa A. Bongiovi
Registration No. 48,933
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No. 23413

March 17, 2004